# Advanced Video Compression

## *Pre-analysis for efficient H.264 Video Coding*

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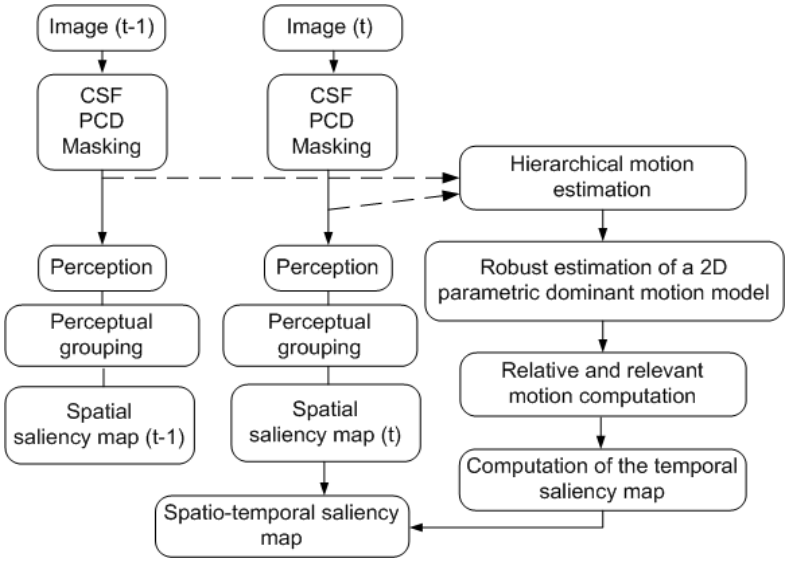
### Application Area:

Improved H.264 video encoding with Region of Interest based compression algorithms.
Subjective quality of the pictures can be significantly enhanced by associating an HVS pre-analysis module to video encoders.

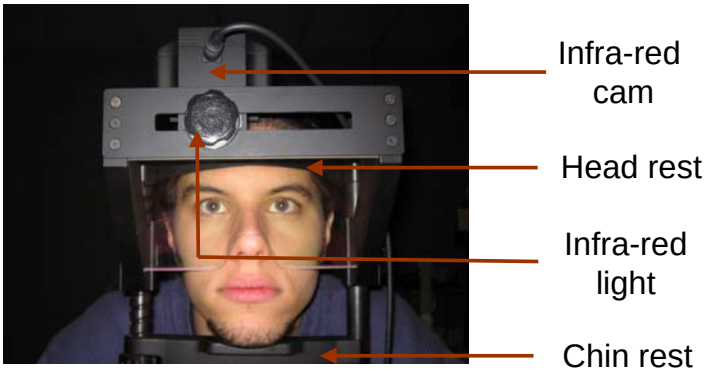
### Features:

- An adaptive video coding scheme based on psycho-visual criteria
- Psycho-visual parameters obtained by modelling the human visual (HVS)
- Bottom-up approach providing imaged based saliency cues
- Models validated by ground truth references
- Intelligent spatio-temporal bit allocation based on the psycho-visual parameters

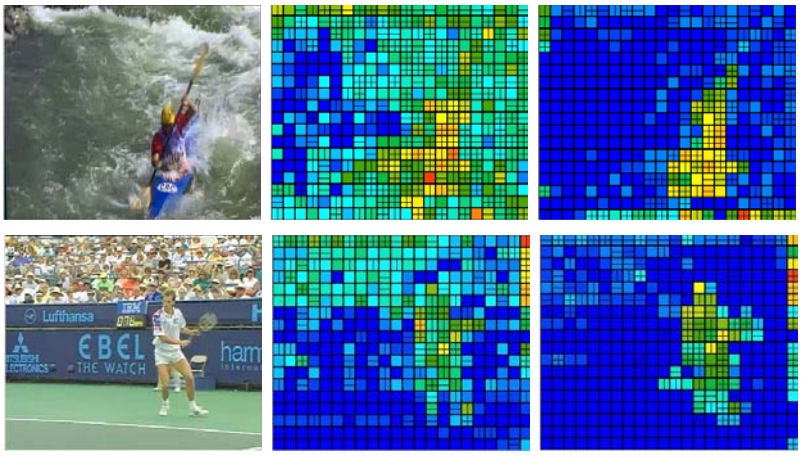
### Architecture of proposed model



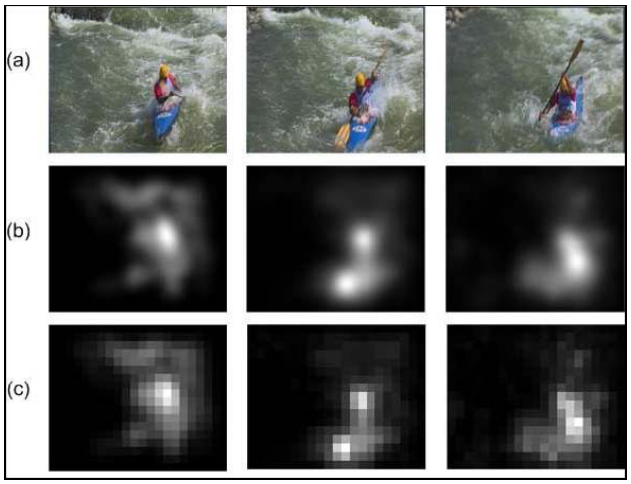

### Ground truth reference methodology




**Source signal** | **Conventional coding** | **Proposed approach**



### Resulting saliency maps

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